

What is claimed is:

1. A manifold for a submersible turbine pump that pumps fuel from an underground storage tank to a fuel dispenser, said manifold comprising:
  - a fuel discharge chamber that receives fuel from the underground storage tank and delivers the fuel to the fuel dispenser;
  - an air return path coupled to the underground storage tank;
  - a bypass tube coupled to said air return path; and
  - an air bleed mechanism coupled to said fuel discharge chamber;said fuel discharge chamber is fluidly coupled to said bypass tube to return air from said fuel discharge chamber to the underground storage tank via said air return path when said air bleed mechanism is activated.
2. The manifold of claim 1 wherein said air bleed mechanism comprises:
  - a threaded orifice through an exterior wall of said manifold that couples said fuel discharge chamber to said bypass tube; and
  - an air bleed screw inserted into said threaded orifice wherein said fuel discharge chamber is fluidly coupled to said bypass tube via said orifice when said air bleed screw is activated and said fuel discharge chamber is fluidly decoupled from said bypass tube when said air bleed screw is deactivated.
3. The manifold of claim 2 wherein said air bleed screw is activated by loosening said air bleed screw.
4. The manifold of claim 2 wherein said air bleed screw is deactivated by tightening said air bleed screw.
5. The manifold of claim 2 wherein said air bleed screw comprises:
  - a shaft, comprising:
    - a threaded portion having at least one flat, vertical side; and
    - a sealing portion adapted to seal said fuel discharge chamber and said bypass tube from the environment.

6. The manifold of claim 5 wherein said at least one flat, vertical side of said threaded portion of said air bleed screw forms an air passage between said air bleed screw and said threaded orifice that fluidly couples said fuel discharge chamber to said bypass tube when said air bleed screw is loosened.
7. The manifold of claim 5 wherein said air bleed screw further comprises a head portion having a slot for receiving the head of a screwdriver.
8. The manifold of claim 5 wherein said shaft of said air bleed screw further comprises:
  - a bottom portion extending into said fuel discharge chamber;
  - an orifice through said bottom portion; and
  - a pin passing through said orifice that limits upward movement of said air bleed screw to prevent removal of said air bleed screw from said threaded orifice in said manifold.
9. The manifold of claim 1 wherein said air return path comprises:
  - an air return chamber coupled to said bypass tube; and
  - an air return conduit having a first end coupled to said air return chamber and a second end coupled to an ullage of the underground storage tank.
10. The manifold of claim 9 wherein said air return conduit is located within a riser pipe that fluidly couples said manifold to the underground storage tank.
11. The manifold of claim 9 wherein said manifold further comprises a substantially cylindrical packer receiving orifice said air return chamber is formed by inserting a packer into the packer receiving orifice.
12. The manifold of claim 11 wherein said air return chamber comprises:
  - a substantially cylindrical chamber formed around the packer between an outer wall of the packer and said manifold; and

a chamber within the packer that couples said substantially cylindrical chamber to said air return conduit.

13. The manifold of claim 1 wherein a pressure differential between said fuel discharge chamber and said air return path forces air within said fuel discharge chamber to flow through said bypass tube and into said air return path when said air bleed mechanism is activated.

14. A method of removing air from a fuel discharge chamber of a manifold of a submersible turbine pump that pumps fuel from an underground storage tank to a fuel dispenser through the fuel discharge chamber, said method comprising:

manually activating an air bleed mechanism located in the manifold of the submersible turbine pump, thereby coupling the fuel discharge chamber to an air return path via a bypass tube; and

coupling said air return path to the underground storage tank such that air from the fuel discharge chamber is returned to the underground storage tank.

15. The method of claim 14 wherein said step of manually activating the air bleed mechanism comprises loosening an air bleed screw inserted into a threaded orifice in an exterior wall of the manifold that couples the fuel discharge chamber to the bypass tube such that the fuel discharge chamber is coupled to the bypass tube via the threaded orifice.

16. The method of claim 15 wherein the step of activating the air bleed mechanism further comprises inserting a head of a screwdriver into a slot in a head portion of the air bleed screw and rotating the air bleed screw counterclockwise, thereby loosening the air bleed screw such that the fuel discharge chamber is coupled to the bypass tube via the orifice.

17. The method of claim 15 further comprising manually deactivating the air bleed screw after the air is removed from the fuel discharge chamber.

18. The method of claim 15 wherein deactivating the air bleed screw comprises tightening said air bleed screw, thereby decoupling the fuel discharge chamber from the bypass tube and the air return path.